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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,570	07/30/2003	Atsushi Nishio	02410338AA	6464

30743 7590 08/10/2005

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EXAMINER

HAMMOND, BRIGGITTE R

ART UNIT	PAPER NUMBER
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2833

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

Office Action Summary	Application No.		Applicant(s)	
	10/629,570		NISHIO ET AL.	
	Examiner		Art Unit	
	Brigitte R. Hammond		2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 4/29/05.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-12 and 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-12 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

Claims 1,2, 5-12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kozel et al. in view of Walburn 5,104,327. Kozel et al. disclose a connection structure comprising: a connector 12, having an inner side face defining a chamber formed with an opening in which a module body 20 is inserted and having an outer side face opposed to the inner side face; the module body 20, inserted from the opening to be accommodated in the chamber; a first conductive member 26, provided on an outer periphery of the module body 20 which is opposed to the inner side face of the connector in a case where the module body is accommodated in the chamber; and a second conductive member 22, fully located within said connector and provided on the inner side face of the connector, such that the first conductive member is brought into contact with the second conductive member in a case where the module body is plenarily accommodated in the chamber, and wherein the second conductive member 22 is extended from the inner side face so as to be connected to an external line. Kozel et al. do not disclose the second conductive member comprising a plurality of parallel contact pins bent into a "generally" inverted v-shape extending to the outer side face so as to be connected to an external line at the outer side face. However, Walburn discloses a second conductive member comprising a plurality of parallel contact pins bent into a "generally" inverted v-shape extending to the outer side face so as to be connected to an external line at the outer side face. It would have been obvious to one having ordinary skill in the art to modify the connection structure of Kozel et al. to include the second conductive member with a plurality of parallel contact pins bent into a "generally" inverted v-shape extending to the outer side face instead of from the inner

face as taught by Walburn, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

Regarding claim 2, wherein the second conductive member 22 is extended in a direction parallel to an inserting direction of the module body.

Regarding claim 5, wherein an end of the chamber opposite to the opening is made open (see fig. 1).

Regarding claim 6, wherein at least a pair 26,26 of the second conductive member 22 is arranged on the inner side face of the connector so as to oppose to each other.

Regarding claim 7, wherein the second conductive member 22 has elasticity.

Regarding claim 8, a plate 56 is attached to a side of the connector opposite to the opening.

Regarding claims 12 and 14, Walburn discloses a first end portion of said contact pin formed into a terminal which is exposed to a lower side of the connector through an associated opening and is bent outwardly horizontally so as to be electrically connected with a circuit formed on a wiring board on which the connector is mounted; and a second end portion of said contact pin bent to project inwardly to form a contact projection for contact with an associated contact pad of the module body.

Regarding claim 9, Kozel et al. discloses a connection structure, comprising: a connector 12, having a top face and a bottom face opposed to the top face, and having an inner side face defining a chamber communicating a first opening formed in the top face and a second opening formed in the bottom face; a module body 20, having a top

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face and a bottom face opposed to the top face, adapted to be accommodated in the chamber; a first conductive member 26, provided on an outer periphery of the module body which is opposed to the inner side face of the connector in a case where the module body is accommodated in the chamber; and a second conductive member 22 provided on the inner side face of the connector, such that the first conductive member is brought into contact with the second conductive member in a case where the module body is plenary accommodated in the chamber. Kozel et al. do not disclose the second conductive member comprising a plurality of parallel contact pins bent into a "generally" inverted v-shape extending to the outer side face so as to be connected to an external line at the outer side face. However, Walburn discloses a second conductive member comprising a plurality of parallel contact pins bent into a "generally" inverted v-shape extending to the outer side face so as to be connected to an external line at the outer side face. It would have been obvious to one having ordinary skill in the art to modify the connection structure of Kozel et al. to include the second conductive member with a plurality of parallel contact pins bent into a "generally" inverted v-shape extending to the outer side face instead of from the inner face as taught by Walburn, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70. Regarding claim 10, the bottom surface of the connector is coplanar with the bottom surface of the module body in a case when the module body is plenary accommodated in the chamber.

Regarding claim 11, Kozel et al. discloses a plate 56 attached to the bottom surface.

Regarding claim 13, Kozel et al. discloses the second conductive member being fully located within said connector.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kozel et al. and Walburn as disclosed in claim 1 above, and further in view of Elberbaum 6,268,882. Kozel et al. and Walburn disclose the invention substantially as claimed except for the module body being a camera. However, Elberbaum discloses a connection structure in fig. 9A, comprising: a connector 61, having an inner side face defining a chamber formed with an opening (not numbered), first 4b and second 4a conductive members and a camera module body 5,7 accommodated in the chamber. It would have been obvious to one of ordinary skill to modify the connector of Kozell by providing a camera (or any other electronic device) as the module body as taught by Elberbaum for electrical connection to the connection structure/socket.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brigitte R. Hammond whose telephone number is 571-272-2006. The examiner can normally be reached on Mon.-Thurs. and Alternate Fridays from 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on 571-272-2800 ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

August 8, 2005


Brigitte R. Hammond
Primary Examiner